PATENT

Attorney Docket No. ATT/2000-0219

→ PTO

LISTING OF CLAIMS:

and

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method for providing full-featured Voice-over Internet Protocol (VoIP) telephony service, comprising the steps of:

receiving in a first network a packet-based VoIP call, wherein the first network is a Hybrid-Fiber Coax network;

translating, in within the first network, the VoIP call into a Time-Division Multiplexed (TDM) call compatible with a second network having the capability of processing TDM calls and providing at least one feature for the call, the translation including the sub-steps of (1) performing required signal processing protocols in the first network to allow the VoIP call to interact with the first network as if the first network was performing switch-based processing functions and (2) mapping IP signaling information developed in the first network into a format suitable for processing by the second network;

routing the TDM call to the second network; processing the TDM call in the second network to perform processing thereon;

routing the TDM call to its intended destination.

- 2. (Original) The method according to claim 1 wherein the translating step includes translating the VoIP call into a bearer portion and a signaling portion.
- 3. (Original) The method according to claim 2 wherein the IP signaling information is mapped into a GR-303 format to include performance as well as functional call aspects to allow full-featured processing by the second network.
- 4. (Previously presented) The method according to claim 3 wherein the IP signaling information includes on-hook and off-hook line status of customer premises equipment (CPE) on which the packet-based VoIP call originated, and the GR-303 format includes

PATENT

Attorney Docket No. ATT/2000-0219

→ PTO

ABCD signaling bits, wherein the line status in the IP signaling information is mapped to an equivalent line status in the ABCD signaling bits.

- 5. (Original) The method according to claim 4 wherein the IP signaling information includes power ringing indication, and the GR-303 format includes the ABCD signaling bits, wherein the power ringing indication received via the ABCD signaling bits is mapped to an equivalent power ringing indication in the IP signaling information.
- 6.(Canceled).
- 7. (Original) The method according to claim 1 wherein the second network is a public switched telephone network.
- 8. (Previously presented) The method according to claim 1 wherein the at least one feature includes at least one of: a CLASS feature, a custom calling feature, or a Centrex feature.
- 9. (Original) The method according to claim 1 wherein the routing step includes translating the call back to a VoIP call if the destination lies in the first network.
- 10. (Currently amended) A method for providing full-featured Voice-over Internet Protocol (VoIP) telephony service, comprising the steps of:

receiving in a first network a packet-based VoIP call and non-voice data packet, wherein the first network is a Hybrid-Fiber Coax network;

separating the non-voice packets from the VoIP call; routing the non-voice packets to a data network;

translating, in within the first network, the VoIP call into a Time-Division

Multiplexed (TDM) call compatible with a second network having the capability of
processing TDM calls and providing at least one feature for the call, the translation
including the sub-steps of (1) performing required signal processing protocols in the first

and

PATENT

Attorney Docket No. ATT/2000-0219

→ PT0

network to allow the VoIP call to interact with the first network as if the first network was performing switch-based processing functions and (2) mapping IP signaling information developed in the first network into a format suitable for processing by the second network;

routing the TDM call to the second network; processing the TDM call in the second network to perform processing thereon;

routing the TDM call to its intended destination.

- 11. (Original) The method according to claim 10 wherein the translating step includes translating the VoIP call into a bearer portion and a signaling portion.
- 12. (Previously Presented) The method according to claim 10 wherein the IP signaling information includes a power ringing indication, and a GR-303 format that includes ABCD signaling bits, wherein the power ringing indication received via the ABCD signaling bits is mapped to an equivalent power ringing indication in the IP signaling information.
- 13. (Original) The method according to claim 10 wherein the IP signaling information includes on-hook and off-hook line status of customer premises equipment (CPE) on which the packet-based VoIP call originated, and the GR-303 format includes ABCD signaling bits, wherein the line status in the IP signaling information is mapped to an equivalent line status in the ABCD signaling bits.
- 14. (Original) The method according to claim 10 wherein the IP signaling information is mapped into a GR-303 format so as to include performance as well as functional call aspects to allow full-featured processing by the second network.
- 15. (Canceled)

PATENT

Attorney Docket No. ATT/2000-0219

- 16. (Original) The method according to claim 10 wherein the second network is a public switched telephone network.
- 17. (Previously Presented) The method according to claim 10 wherein the at least one feature includes at least one of: a CLASS feature, a custom calling feature, or a Centrex feature.
- 18. (Original) The method according to claim 10 wherein the routing step includes translating the call back to a VolP format if the destination lies in the first network.